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09/886,487 06/22/2001 Ravi Kanth V. Kothuri 19111.0042 6094  23517 7590 08/01/2003  SWIDLER BERLIN SHEREFF FRIEDMAN, LLP 3000 K STREET, NW BOX IP WASHINGTON, DC 20007  ART UNIT PAPER NUMBER 2171 3	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
SWIDLER BERLIN SHEREFF FRIEDMAN, LLP 3000 K STREET, NW BOX IP WASHINGTON, DC 20007  EXAMINER  LE, UYEN T  ART UNIT PAPER NUMBER	09/886,487	06/22/2001	Ravi Kanth V. Kothuri	19111.0042	6094	
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
•						
Office Action Summary	09/886,487	KOTHURI ET AL.				
Office Action Summary	Examiner	Art Unit				
- The MAILING DATE of this communication and	Uyen T Le	2171				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status						
1) Responsive to communication(s) filed on	•					
	is action is non-final.	•				
3) Since this application is in condition for allowated closed in accordance with the practice under a	ince except for formal matters, pi Ex parte Quayle, 1935 C.D. 11, 4	rosecution as to the merits is 153 O.G. 213.				
Disposition of Claims						
4) Claim(s) <u>1-47</u> is/are pending in the application						
4a) Of the above claim(s) is/are withdray	vn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-47</u> is/are rejected.	•	•				
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or Application Papers	r election requirement.					
9)⊠ The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on 22 June 2001 is/are: a)[	·	the Examiner				
Applicant may not request that any objection to the	•					
11) The proposed drawing correction filed on						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
<ol> <li>Certified copies of the priority documents</li> </ol>	s have been received.					
2. Certified copies of the priority documents	s have been received in Applicati	on No				
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2  4) Interview Summary (PTO-413) Paper No(s). 5) Notice of Informal Patent Application (PTO-152) 6) Other:						

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### **DETAILED ACTION**

#### Oath/Declaration

1. The oath or declaration is defective because it does not identify the citizenship of one of the inventors. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

#### Abstract

2. The abstract of the disclosure is objected to because it exceeds the limit of 150 words. Correction is required. See MPEP § 608.01(b).

# Specification

3. The disclosure is objected to because of the following informalities: it contains typographical error at page 1. Furthermore, the specification mentions Figures 13a, 13b, 14a, 14b. However, the drawings show two Figures 13 and two Figures 14.

Appropriate correction is required.

#### **Drawings**

4. The drawings are objected to because there are two figures labeled 13 and two figures labeled 14. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

# Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-45 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1 and 29 merely recite abstract ideas not implemented as method steps of any computerized process.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 6. Claims 1-47 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention because:
  - Claim 1, "the first geometry" at line 3 lacks antecedent basis
- Claim 1, "the secondary filter condition" at line 13 lacks antecedent basis. Does applicant intend to mean the intermediate filter condition--?

Claims 1, 29, 46, 47, last paragraph is not understood. Therefore, the limitations cannot be ascertained. Furthermore, the preamble of claims 1, 29, 46, 47 does not seem to be related to the claimed subject matter. Note that nowhere in the body of the claim language is relationship among objects of a database mentioned.

# Claim Objections

- 7. Claims 1- 47 are objected to because of the following informalities:
  - claims 1, 29, line 9, claims 46, 47, line 12, a comma has to be inserted after "condition";

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- claims 1, 29, line 6, claims 46, 47, line 9, –the—has to be inserted after "comparing";
- claim 8, line 3 seems to repeat a limitation already recited in the parent claim;
- claims 8-11 are objected to because applicant seems to intend to further limit a feature of claim 1. However, claim 1 does not recite any "dividing" operation.

#### Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Beesley et al (US 6,252,605) teach a system and method for packing spatial data in an R-tree.

Kim et al (US 5,988,853) teach placing names fro point-features on a map based on a plane sweeping technique.

Kim et al (US 6,438,269) teach multi-step filtering spacious objects.

Fayyad et al (US 6,263,334) teach density-based indexing method for efficient execution of high dimensional nearest-neighbor queries on large databases.

Web et al (US 5,428,744) teach object-oriented system for building a graphic image on a display.

Israni et al (US 6,308,177) teach storage of geographic data on physical media.

Silva et al "An exact interactive time visibility ordering algorithm for polyhedral cell complexes", IEEE 1998, pages 87-94.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen T Le whose telephone number is 703-305-4134. The examiner can normally be reached on M-F 7:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Uyen Le

July 27, 2003

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